

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-36 (canceled).

37. (previously presented) An optical sensing device for detecting optical features of valuable papers, comprising first and second photocouplers positioned in the vicinity of and on the opposite sides of a passageway for guiding the transported valuable paper;

    said first photocoupler comprises a first light emitting element for emitting a first light of a first wavelength, and a first light receiving element adjacent to said first light emitting element;

    said second photocoupler comprises a second light emitting element for emitting a second light of a second wavelength different from the first wavelength, and a second light receiving element adjacent to said second light emitting element;

    the first light emitting element is apposed to the first light receiving element transversely to the transported direction of the valuable paper and in alignment with the second light receiving element across the passageway;

    the second light emitting element is apposed to the second light receiving element transversely to the transported direction of the valuable paper in alignment with the first light receiving element across the passageway;

    the first light receiving element receives the first light reflected on the valuable paper from the first light emitting

element and the second light that penetrates the valuable paper from the second light emitting element;

the second light receiving element receives the second light reflected on the valuable paper from the second light emitting element and the first light that penetrates the valuable paper from the first light emitting element;

one of the first and second lights is an infrared ray, and the other of the first and second lights has a wavelength other than wavelength of infrared ray; and

the first and second light emitting elements are turned on at the different points in time from each other.

38. (previously presented) The optical sensing device of claim 37, wherein infrared ray received by the receiving element provides reference or basic light data for detecting a light amount level of light other than infrared ray.

39. (previously presented) The optical sensing device of claim 37, wherein the light other than infrared ray is selected from the group consisting of red, green, yellow, blue and ultraviolet lights.

40. (previously presented) An optical sensing device for detecting optical features of valuable papers, comprising first and second fourfold assemblies longitudinally arranged before and behind along a passageway for guiding the transported valuable paper;

said first fourfold element comprising first and second photocouplers positioned in the vicinity of and on the opposite sides of the passageway;

said second fourfold element comprising third and fourth photocouplers positioned in the vicinity of and on the opposite

sides of the passageway;

the first and third photocouplers are arranged in vertically spaced relation to and in alignment to respectively the second and fourth photocouplers;

the first photocoupler comprises a first light emitting element for emitting a first light, and a first light receiving element adjacent to said first light emitting element;

the second photocoupler comprises a second light emitting element for emitting a second light of the wavelength different from that of the first light, and a second light receiving element adjacent to said second light emitting element;

the third photocoupler comprises a third light emitting element for emitting a third light, and a third light receiving element adjacent to the third light emitting element;

the fourth photocoupler comprises a fourth light emitting element for emitting a fourth light of the wavelength different from that of the third light, and a fourth light receiving element adjacent to the fourth light emitting element;

the first light receiving element receives the first light reflected on the valuable paper from the first light emitting element and the second light penetrating the valuable paper from the second light emitting element;

the second light receiving element receives the second light reflected on the valuable paper from the second light emitting element and the first light penetrating the valuable paper from the first light emitting element;

the third light receiving element receives the third light reflected on the valuable paper from the third light emitting element and the fourth light penetrating the valuable paper from the fourth light emitting element;

the fourth light receiving element receives the fourth light reflected on the valuable paper from the fourth light

emitting element and the third light penetrating the valuable paper from the third light emitting element;

one of the first and second lights and one of the third and fourth lights are infrared rays, and the other of the first and second lights and the other of the third and fourth lights have the wavelength other than wavelength of infrared ray;

the first and second light emitting elements are turned on at the different points in time from each other;

the third and fourth light emitting elements are turned on at the different points in time from each other.

41. (previously presented) The optical sensing device of claim 40, wherein the other of the first and second lights has the wavelength other than wavelength of the other of the third and fourth lights.

42. (previously presented) The optical sensing device of claim 39 or 40, wherein infrared ray received by the receiving element provides reference or basic light data for detecting a light amount level of light other than infrared ray.

43. (previously presented) The optical sensing device of claim 39 or 40, wherein the light other than infrared ray is selected from the group consisting of red, green, yellow, blue and ultraviolet lights.

44. (new) An optical sensing device for detecting optical features of valuable papers, comprising first and second photocouplers positioned in the vicinity of and on the opposite sides of a passageway for guiding the valuable paper;

the first photocoupler comprising a first light emitting element for emitting a first light of a first wavelength and a

first light receiving element adjacent to said first light emitting element;

    said second photocoupler comprising a second light emitting element for emitting a second light of a second wavelength different from the first wavelength of the first light emitted from the first light emitting element, and a second light receiving element adjacent to said second light emitting element;

    the first light receiving element receiving the first light reflected on the valuable paper and the second light that penetrates the valuable paper from the second light emitting element; and

    the second light receiving element receiving the second light reflected on the valuable paper and the first light that penetrates the valuable paper from the first light emitting element.

45. (new) The optical sensing device of claim 44, wherein the first photocoupler is disposed in vertically spaced relation to the second photocoupler across the passageway.

46. (new) The optical sensing device of claim 44, wherein the first light emitting element is apposed to the first light receiving element transversely to the transported direction of the valuable paper and in alignment with the second light receiving element across the passageway; and

    the second light emitting element is apposed to the second light receiving element transversely to the transported direction of the valuable paper in alignment with the first light receiving element across the passageway.

47. (new) The optical sensing device of claim 44, wherein said

first and second light emitting elements are turned on at the different points in time from each other to prevent the first and second light receiving elements from simultaneously receiving the first and second lights.

48. (new) The optical sensing device of claim 44, wherein one of the first and second lights is an infrared ray; and  
the other of the first and second lights has a wavelength other than wavelength of infrared ray.

49. (new) The optical sensing device of claim 48, wherein infrared ray received by the receiving element provides reference or basic light data for detecting a light amount level of light other than infrared ray.

50. (new) The optical sensing device of claim 48, wherein the other of first and second lights are selected from the group consisting of red, green, yellow, blue and ultraviolet lights.

51. (new) An optical sensing device for detecting optical features of valuable papers, comprising first and second fourfold assemblies longitudinally arranged before and behind along a passageway for guiding the transported valuable paper;  
said first fourfold element comprising first and second photocouplers positioned in the vicinity of and on the opposite sides of the passageway;

    said second fourfold element comprising third and fourth photocouplers positioned in the vicinity of and on the opposite sides of the passageway;

    said first photocoupler comprising a first light emitting element for emitting a first light and a first light receiving element adjacent to said first light emitting element;

said second photocoupler comprising a second light emitting element for emitting a second light of the wavelength different from that of the first light, and a second light receiving element adjacent to said second light emitting element;

    the first light receiving element receiving the first light reflected on the valuable paper and the second light penetrating the valuable paper;

    the second light receiving element receiving the second light reflected on the valuable paper and the first light penetrating the valuable paper;

    said third photocoupler comprising a third light emitting element for emitting a third light and a third light receiving element adjacent to the third light emitting element;

    said fourth photocoupler comprising a fourth light emitting element for emitting a fourth light of the wavelength different from that of the third light, and a fourth light receiving element adjacent to the fourth light emitting element;

    the third light receiving element receiving the third light reflected on the valuable paper and the fourth light penetrating the valuable paper; and

    the fourth light receiving element receiving the fourth light reflected on the valuable paper and the third light penetrating the valuable paper.

52. (new) The optical sensing device of claim 51, wherein the first and third photocouplers (5 and 9) are arranged in vertically spaced relation to and in alignment to respectively the second and fourth photocouplers.

53. (new) The optical sensing device of claim 51, wherein the first and second light emitting elements are turned on at the different points in time from each other; and

the third and fourth light emitting elements are turned on at the different points in time from each other.

54. (new) The optical sensing device of claim 51, wherein the other of the first and second lights has the wavelength other than wavelength of the other of the third and fourth lights.

55. (new) The optical sensing device of claim 51, wherein one of the first and second lights is an infrared ray, and the other of the first and second lights has a wavelength other than wavelength of infrared ray.

56. (new) The optical sensing device of claim 55, wherein infrared ray received by the receiving element provides reference or basic light data for detecting a light amount level of light other than infrared ray.

57. (new) The optical sensing device of claim 55, wherein the light other than infrared ray is selected from the group consisting of red, green, yellow, blue and ultraviolet lights.